

HOWARD R. HUGHES COLLEGE OF ENGINEERING

university of nevada, las vegas

FALL
2007



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Top right: Inaugural recipient of the MGM MIRAGE Academic Excellence Scholarship, Holly Walker, is beginning her UNLV career. Left: Students Tim Goins, a UNLV football player, and Natalia Soberanes, member of the world champion *FIRST* FRC Robotics team, are just two examples of the high caliber of students in the College of Engineering. Read more about them on pages 9 and 4, respectively.

Inaugural MGM MIRAGE Scholarship Recipient Begins the Path to her Goals

Like many incoming UNLV freshmen beginning their college careers this year, Holly Walker faced the eye-opening transition from high school to college life. One thing she doesn't have to worry about, however, is the cost of higher education.

Walker was named the inaugural recipient of the MGM MIRAGE Academic Excellence Scholarship, which covers the full cost of her four-year attendance. An annual award funded by the largest corporate scholarship endowment in UNLV's 50-year history, the MGM MIRAGE Academic Excellence Scholarship underwrites scholarships for National Merit® scholars at UNLV.

Walker, a 2007 graduate and valedictorian of Henderson's Silverado High School and a National Merit® Finalist, is currently pursuing a double major in engineering and psychology as a member of the Honors College. Her lifelong career goal is to become a Supreme Court Justice.

"I anticipate the day when I can contribute to society by assisting individuals in achieving the American dream, be it through patenting their inventions or bettering communities through medical and technological innovations," said Walker.

Walker herself is somewhat of an entrepreneur. Walker said her passion for website design allows her to explore her fascination with computers

and programming while providing her with an outlet to express her artistic creativity. This combination ultimately led her to pursue the entrepreneurial web design business that she still owns.

As a first-generation college student, Walker has been motivated by her family to pursue her education. She said that though her family was never rich, they were always affluent in spirit. Her older brother also attends UNLV, and will be the first in her family to earn a college degree. "He is undoubtedly a role model to me and is one of the main reasons why I wish to pursue a double major," said Walker.

Though she had been concerned about financing her college and law school education, Walker said, "I now feel that an enormous burden has been lifted."

She hopes to pursue dual degrees and continue to law school, where she can pursue her passion of improving the community and the lives of others. "I receive so much happiness from making a difference – no matter how small – that I cannot imagine pursuing a life that does not involve helping or serving others," said Walker.

The MGM MIRAGE Academic Excellence Scholarship Endowment is funded through a \$1 million gift from MGM MIRAGE. ●

— Tony Allen

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MESSAGE FROM THE DEAN



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*Eric Sandgren, Ph.D.
Dean, Howard R. Hughes
College of Engineering*

When the 3R's are mentioned, my thoughts turn back to my grade school days when the term meant reading, writing, and arithmetic. Today, however, I would like to present the 3R's in the current context of the Howard R. Hughes College of Engineering. Today they stand for recruitment, research, and retention. These topics by themselves and intertwined together are our strategic plan and are vital to our ability to reach our goals as a college.

Recruitment

When I arrived on campus, almost five years ago, the university was growing at a rate of 7 to 10 percent per year, and even though the number of students entering engineering and computer science programs nationally was decreasing, we managed to maintain continual growth in the college. During my tenure, solid relationships have been established with every high school in Clark County, while also expanding our recruiting efforts into Northern Arizona and Eastern California. We began this academic year with 12 percent growth in terms of new students. Much of this growth is a result of the hard work of everyone in the college – particularly Robert Abella, Ph.D., director of undergraduate affairs.

Research

Research becomes a driver in UNLV's quest to become classified as a research extensive university and the College of Engineering will play a key role in this effort. New projects in the areas of unmanned aerial vehicles sponsored by the Air Force Research Office and in transportation funded by the U.S. Department of Transportation

add breadth to our research portfolio. These projects, combined with our efforts in energy, water, nanotechnology, homeland security, entertainment, and pulsed power provide our faculty and students with a host of opportunities to get involved in relevant research activity. Our research answers the community needs locally, regionally, nationally, and internationally.

Retention

Engineering is a difficult major that requires a high level of tenacity to successfully earn the professional degree. Successful retention rates mean we must ensure that the students we admit are capable of succeeding in this major. We instituted a program which provides entering students who need additional support in the area of mathematics with an avenue to succeed as they prepare to declare their major. Additionally, we have altered our advising activity to better meet students' needs. We also offer the courses students need to maintain the curriculum progression to earn their degree. The impact of these individual efforts will positively affect our retention and graduation rates over the next few years.

Las Vegas is probably best known as a city of change, and as part of this great city, we are committed to change as well. The 3R's represent activities within the college that are directed at changing our culture and answering our quest for increased local and national visibility while leading the culture change within engineering, computer science, and informatics. We appreciate your continued support as we Engineer a Difference. ●

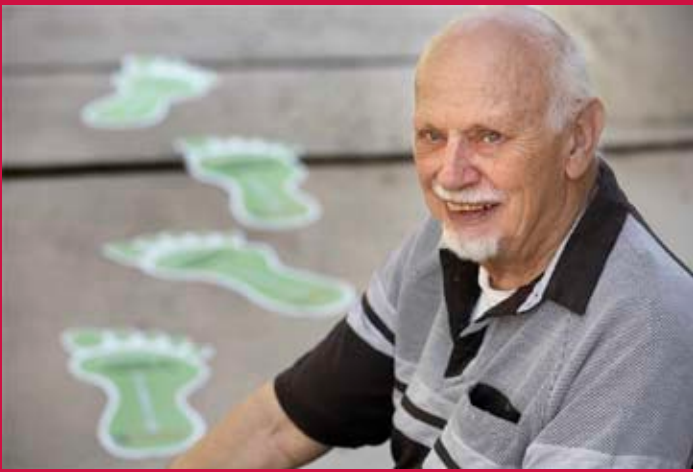
“How Can I Help the Howard R. Hughes College of Engineering?”

Help us recruit the engineers of the future.

The *FIRST* FRC Robotics Competition is a multinational competition that teams professionals and high school students to solve an engineering design problem through designing and building robots. The competition is a high-tech spectator event, the result of focused brainstorming, real-world teamwork, and dedicated mentoring. The intense and competitive process inspires students to pursue further opportunities in science, engineering, and technology.

In 2007, the competition reached more than 28,000 U.S. and international students in over 1,100 teams in 36 competitions. This year's Las Vegas Regional at UNLV hosted 58 teams from around the country and drew a crowd of thousands, increasing the visibility of the College of Engineering and aiding in recruitment of the most talented high school students.

We invite you to get involved in this amazing program. Sponsorship opportunities are available for the 2008 *FIRST* FRC Robotics Competition Las Vegas Regional March 27-29, 2008. For more information about supporting the *FIRST* FRC Robotics Competition, or other programs at the Howard R. Hughes College of Engineering, please contact Caleen Johnson at (702) 895-2913 or caleen.johnson@unlv.edu.



Professor Emeritus Herb Wells reflects on 50 years of service to UNLV.

Part-time Instruction Leads to 50 Years of Service

In September 1957, Malcolm Graham of Timet approached one of his employees and asked if he would be interested in teaching surveying part-time. For the next four years, professor emeritus Herb Wells taught several courses on a part-time basis. Wells' part-time instruction has led to 50 years of service to UNLV and the college.

UNLV engineering has come a long way since Wells, then a local mining engineer, was hired to offer courses that could lead to enrollment in the engineering bachelor's programs located in Reno, Nev. Wells was dedicated to seeing the programs succeed and through his many roles over the years, ensured that UNLV would have an engineering program that rivaled our colleagues in Reno.

Wells also has a great ability to attract students to the fields of engineering and computer science. Routinely, he involves his classes in recruiting others into the engineering field – for instance, the green footprints that he engaged his students in painting on the university sidewalks. Those footprints led directly to the engineering offices. In honor of his 50 years of service, the college is creating the footprints in the form of vinyl cutouts, and they will be used to advertise their upcoming events.

Today, Wells is happy to continue to serve the college and the university. Wells said his "most treasured delight after fifty years of service, is the outstanding good fortune of having really great students."

Along his journey, Wells came to see the purpose of his legacy – the importance of teaching his craft to future generations while helping to create UNLV's first 50 years. ●

Mechanical Engineering Student Participates in Elite International Program

Mechanical engineering student Kenneth Hynes traveled to Munich, Germany, over the summer to attend a university program at the Technical University of Munich, also known as TUM (die Technische Universität München), one of three elite schools in Germany. Hynes was sponsored by the DAAD or "Deutscher Akademischer Austausch Dienst," which translated means "The German Academic Exchange Service."

The DAAD is the German National Agency for the support of international cooperation. Hynes participated in the High Tech program, a series of intensive seminars about numerous engineering subjects that included excursions to various factories including the main Audi production plant in Ingolstadt and one of the Siemens plants based out of Erlangen. The program was extremely intense but rewarding, said Hynes. He felt it was a life changing experience to work with students from all over the world – including China, Canada, Greece, and Singapore – on interdisciplinary projects.

Hynes took the opportunity to attend a few lectures at the university including thermodynamics and engineering math, difficult enough subjects in a native language, let alone in a foreign language.

"The engineering profession is rapidly changing due to globalization pressure. Most companies now are looking for engineers who are at ease with different cultures. Kenneth's effort should be commended. We are trying to encourage our students to participate in similar activities," said department of mechanical engineering chair, Mohamed Trabia, Ph.D.

When asked about his experience, Hynes said, "What I enjoyed most was being able to meet many super-intelligent students from all over the world that helped me experience engineering in a totally new and foreign environment." ●

Computer Science Professor Yfantis Receives Tech Nevada Award

In October, the Technology Business Alliance of Nevada held their annual awards luncheon at which Angelo Yfantis, Ph.D., received the 2007 Educator of the Year Award. Professor Yfantis has been part of the School of Computer Science for 25 years. He is also the director of the UNLV digital image processing and computer graphics laboratory.

He teaches classes in digital image processing, computer graphics, statistical pattern recognition, and cryptography. "My greatest moments are those when my students soar to new heights through the application of what I deliver in my courses," said Yfantis. ●



Rodd Buckle

Professor Angelo Yfantis enjoys teaching UNLV students, and his work is honored with an award.

Natalia Soberanes was part of Team 987, which won the world competition in *FIRST* FRC Robotics.



Team 987 Robot Inspires Student to Pursue an Engineering Degree

Natalia Soberanes is a new student in the Howard R. Hughes College of Engineering, but UNLV isn't new to her. As president of Team 987 from Las Vegas' Cimarron-Memorial High School, she and her teammates came to UNLV for the *FIRST* FRC Robotics Regional Competition last spring. Their team advanced to the 2007 *FIRST* FRC Robotics Championships in Atlanta, Ga., where they won the world championship.

The Las Vegas regional competition brings approximately 1,500 high-school students that wish to pursue a science or engineering degree to UNLV for the event. The teams debut their robots to try to win the regional competition, and advance to the next level.

This experience led Soberanes to UNLV in the pursuit of a computer engineering degree. Originally from Mexico, she lives in Las Vegas with her family and is the first in her family to go to college. She had the opportunity to complete her education in Mexico, but chose to stay in Nevada to attend UNLV.

"I chose UNLV because it was close to my family and I had great scholarship opportunities," said Soberanes. She was awarded a Minority Engineering Scholarship once she was accepted to the program. Soberanes chose the College of Engineering because of the willingness of the college's staff and faculty to make the process of transitioning from high school to college easy.

She is excited that her family will have the opportunity to travel from Mexico to meet those at the college who have helped her on her journey.

"Everyone I have come in contact with is very professional, and I want to become the same professional engineer," said Soberanes. ●

National Achiever® Semifinalist Chooses UNLV



Rodd Buckle

Computer science has been a passion of Christie Finnie's for as long as she can remember.

When it came to time to select a university that offered a comprehensive program in this field, she knew UNLV was the right choice for her. The university's extensive research opportunities and ethnically diverse student body fulfilled what she was looking for in a college experience.

While Finnie had the academic motivation to attend UNLV, she did not have the financial support necessary until she became a National Achiever® semifinalist. Through this program, Finnie and 1,600 others like her received the financial aid they needed to attend college.

The National Achiever® is a designation similar to the National Merit® Scholars program. It was established in 1964 to recognize outstanding African-American high school students. More than 140,000 apply to this program every year, and out of this large pool of applicants, approximately 4,600 are honored. ●

Dean Eric Sandgren welcomes new student Christie Finnie.



Construction management student Jake Hammon is one of the recipients of the inaugural Construction Management Advisory Board Scholarship.

Construction Management Program Attracts Top Student

When Jake Hammon graduated from high school in Arizona, he already had a job offer. Due to his high academic achievements, Zitting Brothers Construction offered him a contract in Las Vegas to begin an apprenticeship. His new employer provides Hammon with great work experience, but it also requires that he attain a degree in construction management.

The sophomore knew that he had choices when selecting where he would pursue his bachelor's degree. After looking at his options, Hammon said he chose UNLV because of the overall number of construction management courses that create a well-rounded and in-depth program.

To support his education and reward his academic achievements, the College of Engineering Construction Management Program awarded Hammon a \$2,000 annual scholarship for up to four years. He is one of five incoming students that received the inaugural Construction Management Advisory Board Scholarship. ●



Former Eagles kicker Todd France is pursuing his master's degree in engineering at UNLV.

Student Trades the Football Green for Green Engineering

Graduate student Todd France has made the move from the green football field to researching energy and engineering practices.

France earned his bachelor's degree in mechanical engineering at the University of Toledo in 2002. He chose engineering because math and science careers offered the most lucrative salaries, but more importantly he said, "I have always been fascinated by how and why things work. I want to know what makes it go."

France has played arena football for the Philadelphia Soul and filled in as a kicker for the NFL Philadelphia Eagles. After accomplishing his football dreams, France realized that he wanted to complete his engineering education.

He applied to UNLV's graduate program, and with the guidance of engineering professor Bob Abella, Ph.D., France also earned a graduate assistant position with Robert Boehm, the college's distinguished professor and director of the UNLV Center for Energy Research. Once he completes his graduate degree, France plans to pursue a doctoral degree so that he can teach and conduct research in the field of renewable energy. ●

Technology Meets Commercialization at the College of Engineering

The Mendenhall Innovation Program, founded in 2006, marries the analytic components of engineering with the practical tools of marketing.

A year later, the technology commercialization minor and lecture series has been added, under the guidance of the Mendenhall Innovation Program's director Nick Fiore, Ph.D., and associate director Rama Venkat, Ph.D.

The minor focuses on the early stages of product conception and development, and offers engineering majors the opportunity to gain necessary business skills from faculty and practitioners.

The program was funded by entrepreneur Robert Mendenhall, who hopes that it will give students the tools to transition their working models into the complex world of business. ●

— Allison Miller

Engineering Utilizes Community Partners to Advance the College's Goals of Recruitment, Research, and Retention

Community partnerships are an important aspect of the college's goals of recruiting the brightest students, retaining engineering students, and contributing to innovative research.

One such partner, whose generosity has helped fund several programs related to these goals, is National Security Technologies LLC (NSTec), located in Las Vegas.

"We are dedicated to supporting our hometown university and find this aspect of our partnership to be a particularly fruitful outreach," said NSTec President Steve Younger, Ph.D. "Our intention is to encourage bright young minds to pursue science and engineering careers."

Recruitment of top students is one area Dean Eric Sandgren has selected as a priority for the college.

The Minority Engineering Program, which now enrolls more than 160 students, is designed to help under-represented populations of students successfully pursue an education in the fields of engineering and computer science. This program not only serves as a recruitment tool, but also helps to retain these talented students. The MEP regularly invites speakers on topics such as motivation and career awareness to campus, in order to fully prepare students for the academic and career choices ahead of them. NSTec's gift to the MEP program helps to make these programs possible and supports the college's efforts in recruiting and retaining top students.

"NSTec embraces diversity and has a progressive program that encourages exchange across professions, generations, and cultures," said Younger. "Along with our investment in UNLV's MEP, we work closely with the Hispanic, Asian, and North Las Vegas chambers of commerce, and the Clark County School District's Focus School Program to ensure that we share the importance of developing and placing talented individuals in our organization."

Engineering a Measure of Success

Success in the academic world is measured in many ways. Research awards, publication records, recruiting, and growth all factor in when attempting to substantiate the accomplishments of a particular program or college.

"Regardless of the means of measurement, the 2006-07 academic year was very successful in the history of the Howard R. Hughes College of Engineering," said Dean Eric Sandgren.

Research awards for the college rose to a high of \$16,878,123—a \$14 million improvement over the number awarded in 2000; recruiting received a big boost with the success of the FIRST FRC Robotics Competition and the addition of incoming freshman and National Merit® Finalist Holly Walker; a college survey showed that every recent

engineering graduate looking for job was gainfully employed; and collaborations with the community were strengthened with the opening of a hydrogen-fueling station at the Las Vegas Valley Water District.

Additionally, a recent study by the National Science Foundation revealed that UNLV is the fourth fastest growing university in the nation in terms of academic output, bolstered by strong publication records in science and engineering. From 2004 to 2006, the College of Engineering produced nearly 130 journal articles, 350 conference papers, and 25 book chapters.

An analysis of the NSF study appeared in the August issue of Science Magazine and can be found online at <http://www.sciencemag.org/cgi/content/full/317/5838/582>. ●

— Tony Allen



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UNLV President David B. Ashley thanks Steve Younger, Ph.D., president of NSTec, for the company's continued support of the university.

Another area that has helped to recruit top students to UNLV is the *FIRST* FRC Robotics program. This competition brings talented high school students to UNLV for a regional contest in engineering and robotics. One recent team winner, Natalia Soberanes, chose to attend UNLV and is now pursuing her degree in computer engineering. (See story on page 4.) NSTec has been a major sponsor of this event. In addition to providing a financial contribution, NSTec employees supported the competition as volunteers.

Research is an integral part of the education of students in the college. These programs afford many students the opportunity to gain research experience in addition to the theory taught in the classroom. The construction of the new Science and Engineering Building will be a cornerstone of the college's efforts to increase research space and opportunities, and NSTec has made a financial pledge to help fund this building. The new facility incorporates



Rodd Buckle

The *FIRST* FRC Robotics Competition Las Vegas Regional is sponsored in part by NSTec, and their staff members serve as volunteers at the event.

additional office and classroom space, and features state-of-the-art laboratories for use by research scientists and students.

"Our relationship with NSTec allows our faculty and students to work on some of the most interesting and demanding engineering projects in the world," said Dean Eric Sandgren. "With the help of community partnerships such as the one established with NSTec, the College of Engineering is advancing its mission and striving to meet recruitment, retention, and research goals." ●

Partnership Reaches Out to Local High School Teachers

Over the summer, the United States Air Force partnered with UNLV's Center for Energy Materials Interaction Technology Initiative of Nevada to sponsor a summer laboratory research experience for local high school teachers.

Bob Schill, associate professor of electrical and computer engineering and director of EMITON, collaborated with the Air Force Office of Scientific Research to outline the summer program.

The summer laboratory research experience invited local high school science and mathematics teachers teaching physics or applied mathematics to participate by submitting a one page paper on how they will creatively implement their research experience into their course curriculum for the 2007-08 school year.

Two local teachers from Desert Pines High School, Greg Pickens and Jeff Viggato, were selected for the program where they participated in a detailed experiment involving a Faraday tube. Using physics and mathematical concepts, Pickens and Viggato revisited concepts such as gravity, charge transfer, and electrostatics.

Also during the experience, the teachers met with members of EMITON, the university's source for research studies on

electromagnetic phenomena interacting with materials, liquids, gases and plasmas in support of government and private industry. EMITON's engineers, scientists, and students lead discussions on research initiatives taking place at UNLV.

After the program's completion, the teachers were granted an oscilloscope, a high voltage supply, and materials to build the Faraday tube to utilize at their high school.

Viggato said of the summer experience at UNLV, "It was the most fun that I have had in a long time. I can't wait to introduce this to my students."

In response to the success that the program has received, Schill plans to offer the program again in summer 2008.

The summer laboratory research experience is just one example of how the College of Engineering is reaching out to the Southern Nevada community and its faculty, staff, and students, and so the college's commitment to inventing the future through research and partnership continues. ●

Las Vegas Entrepreneur Shares Tips for Success with Students

The Innovation Lecture Series – part of the Mendenhall Innovation Program (see page 6) – began with its inaugural presentation in October with Paul Lew, CEO, president, and chief engineer of Lew Aerospace Inc., who spoke with students about how engineering can be a viable and exciting career choice. Amid a display of composite aircraft wings, race car bumpers, and light-weight bicycle tires, Lew conveyed to students that engineering is a real career choice with as much latitude as the imagination will allow.



Lew, an entrepreneur and the owner and founder of Lew Aerospace in Las Vegas, spoke with students about some of the key necessities of entrepreneurship. “If you want to be successful, you have to believe in yourself no matter what others say,” Lew shared. “If you are persistent, you will succeed.”

Lew said that one key component to success that engineers need to consider is how to make the products they create easy to manufacture and market to the public. He said that planning for the product development phase makes ideas more likely to be brought to the mainstream, and he shared an example of how Lew Racing worked with the Red Rock Resort to offer test rides of the Lew Wheels on their bicycle tours of the Red Rock Canyon.

Lew showed photographs and videos of the aerial vehicles Lew Aerospace is producing and shared stories of his successes, as well as some failures, with the students.

Robert Mendenhall and Paul Lew discuss the Lew Wheel. Lew developed these light-weight bicycle wheels, the pair of which weighs less than two pounds.

Dean Eric Sandgren shared with the students that technical preparation is not enough in today's marketplace. Graduates need to also be prepared to be innovative and be able to use their skills in product development.

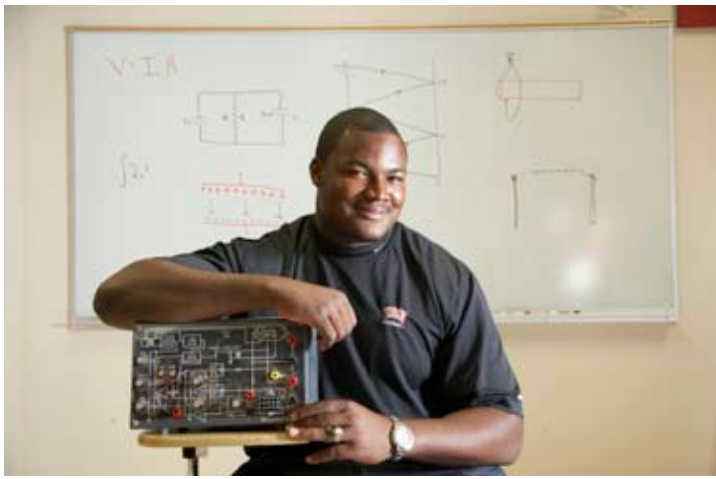
For Lew, collaborating with UNLV means bringing technology to the region and providing access to better thinkers and people interested in being on the cutting edge of technology.

“What I value most is being able to influence the future of our world,” said Lew of his association with UNLV. “It is exciting to have the opportunity to work with students who will take this technology and evolve it.” ●



The Humpy Bumper, a carbon composite bumper for a race car, was developed by Lew at the request of H.A. “Humpy” Wheeler, the President of Speedway Motorsports, Inc. The bumper makes a crash safer for the driver by reducing the amount of energy the driver absorbs in a crash.

Rodd Buckle



Tim Goins finds success in the classroom and on the football field.

Student Athlete Dedicated to Achieving Goals

When Tim Goins sets a personal or academic goal, he tackles it with a competitive spirit. This spirit helps him not only in academics, but also athletics, because for five years Goins has been a member of UNLV's football team. This athlete also has a passion for electrical engineering. With one tough game plan on his hands to do both, and many doubting his success, Goins finds himself ahead of the game.

Before he leaves UNLV in May 2008, Goins will have a premier list of accomplishments in both the athletic and engineering fields. One noteworthy honor is UNLV's Roosevelt Fitzgerald Award that is given to a student-athlete who displays excellent leadership in school and in the community.

"Tim's success at UNLV is a tribute to both his character and persistence," said Eric Sandgren, dean of the College of Engineering.

Always looking for ways to be a positive role model at UNLV, Goins has been a member of the Rebel Leadership Committee and a featured speaker for numerous young audiences. "Possibly speaking to the next successful person of the future, taking these chances to speak is well worth it," he said of the experience.

Goins will accept his electrical engineering degree at UNLV's spring commencement and has many endeavors outlined for his future.

"I plan to play professional football and to open an engineering business in the United States that conducts business in Japan and other international markets," said Goins. ●

Founding AFROTC Member Commissioned

Cadet Jessica Claypool has held many distinguished positions since entering the founding cadre of the College of Engineering's AFROTC Detachment 004 two years ago. Topping off her achievements, Claypool was commissioned as a 2nd Lieutenant in the Air Force at the UNLV Marjorie Barrick Museum of Natural History on August 27.

Claypool's commissioning was a family affair; her father, a colonel in the Army, administered the military oath of office, and her mother and siblings pinned her wings. She is the fourth generation of her family to serve in the military.

Claypool previously served as the wing commander of the cadets while assisting Col. Mike Hogan and his staff to enhance the cadet program. She was such a strong leader that a general who visited six weeks after the program started commented that the detachment performed at a level far beyond most new programs he observes.

Col. Hogan credits Claypool with "establishing a legacy which the detachment will build upon for many years to come and one which adds to the already outstanding UNLV reputation." ●

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Pushing the Boundaries of Knowledge

A new visiting assistant professor in the department of electrical and computer engineering believes strongly in the continuous pursuit of knowledge. Pushkin Kachroo, Ph.D., has earned multiple degrees as he pursued his passion of never-ending self-evolvement.

Kachroo, who is also an associate professor in the Bradley Department of Electrical & Computer Engineering at Virginia Tech, has earned two doctoral degrees. His first doctorate was in mechanical engineering, which he received from the University of California, Berkeley in 1993, and the second was in mathematics from Virginia Tech in 2007.

These degrees have given Kachroo the ability to understand the world from multiple perspectives, giving him a cutting edge in the constantly evolving world of research.

"In order to think broadly and apply our knowledge, we must create an individual vastness of knowledge. I create that vastness by enhancing my knowledge with the pursuit of several degrees, conducting active research, and by publishing journal articles and books. Ultimately I am constantly evolving as an individual with cross-disciplinary pursuits," said Kachroo.

An example of his cross-disciplinary work involves a current research grant that examines the mathematical theory and applications of feedback control. Feedback control is tested on a variety of applications including evacuation, robotics, and human computer interface.

Kachroo also enjoys sharing his research with the public and has composed six books including his most recent work titled *Pedestrian Dynamics: Feedback Control of Crowd Evacuation*. He is also the author of more than 80 publications, which include a variety of journal papers. He has won several awards, including the Most Outstanding New Professor award and the Dean's Teaching Award, both from Virginia Tech. ●



Rodd Buckle

Visiting assistant professor, Pushkin Kachroo, shares his love of knowledge with engineering students at UNLV.

Professors Host Scouts for Eighth Consecutive Year

"Exposing young people to science, engineering, and mathematics in a fun way piques their curiosity and imagination," suggests Bob Schill, an associate professor in the College of Engineering.

Schill, along with faculty members Walter Vodrazka and Tom Piechota and community member Scott Jarvis, worked with 125 Boy and Girl Scouts this semester. The scouts participated in a series of activities that promote engineering and science.

For their participation, each scout earned a merit badge or a future activity badge as part of the "The Boy Scout Engineering Merit Badge/Girl Scout Build a Better Future Activity Patch Program."

Some of the featured activities included the use of an engineering approach to make step-by-step plans for the scouts' next camp out and a presentation of how water is pumped from one site through a reservoir and then conveyed to homes.

These students also played interactive games to challenge their science, math, and engineering skills and received information about how to prepare for college entrance requirements.

"The scouting organization guides young people to be well rounded citizens. This is a unique opportunity for the professional community to interact and share their time and talents with these young people," said Schill. ●

DONOR HONOR ROLL

This roll of honor recognizes the contributions to the Howard R. Hughes College of Engineering from May 15, 2007 to Oct. 31, 2007. The college wishes to thank the following individuals, corporations, and foundations for their generous support. Every gift to UNLV is valued. It is important to us to recognize all donors correctly. Please notify the UNLV Foundation at (702) 895-3641 of any discrepancies.

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Christine Wallace
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Richard Zaragoza '03

UNLV Is Celebrating 50 Years

UNLV's 50th birthday bash is under way and we want you to be part of the fun. Mark your calendar, and join us for these exciting events.

Capitol Steps in Concert

The political satire group performing its special brand of comedy.

January 17, 2008

Itzhak Perlman Anniversary Concert

An evening of music and celebration featuring the violin virtuoso conducting a special UNLV orchestra.

January 26, 2008

"Mark Twain Tonight"

Underwritten by Wynn Resorts

Hal Holbrook performing his award-winning portrayal of Mark Twain.

May 3, 2008

Picnic Pops Concert

An outdoor concert featuring Broadway and recording star Linda Eder and the Las Vegas Philharmonic.

June 7, 2008

Visit <http://celebrating50.unlv.edu>
for more information on anniversary events.



UNLV's 50th Anniversary is sponsored by:



Premier Sponsor



Civil Engineering Students Volunteer in Holiday Tradition

The Magical Forest at Opportunity Village is a holiday tradition in Southern Nevada—a veritable winter wonderland in the desert where hundreds of thousands flock to enjoy the sights and sounds of the season, all while helping to support Las Vegas' favorite charity.

This winter, the Magical Forest features some engineering additions as the UNLV American Society of Civil Engineers Student Chapter donates its time and talents to construct a forest display that will showcase the College of Engineering and its commitment to the community. The highlight of the display is the ASCE student-built steel bridge, a 20-foot long, 650-pound structure, which finished fourth overall at the Pacific Southwest Regional Conference last March.

"Working with Opportunity Village not only gives us an opportunity to display what UNLV engineering students can do; it also provides a chance to give back to an organization that helps so many people in our community," said Vik Sedhev, president of UNLV ASCE.

The students have also volunteered their time to both decorate and staff the Magical Forest this year, a tradition they plan to continue each winter.

The Magical Forest at Opportunity Village is open from November 22 through December 30. For more information, please visit www.opportunityvillage.org. ●

— Tony Allen



Engineering students are volunteering at the Magical Forest at Opportunity Village this holiday season.

Courtesy of Opportunity Village